What is claimed is:

1. A gene sequence of a spacer region between a gene coding 16S rRNA and a gene coding 23S rRNA of *Pectinatus frisingensis* containing a part of the base sequence of the whole base sequence represented by SEQ ID NO: 1.

2. A gene sequence of a spacer region between a gene coding 1S rRNA and a gene coding 23S rRNA of *Pectinatus* frisingensis containing a part of the base sequence or the whole base sequence represented by SEQ ID NO:2.

3. An oligonucleotide wherein the gene sequence of a spacer region between a gene coding 16S rRNA and a gene coding 23S rRNA of *Pectinatus frisingensis* has at least one of the following sequence groups or the corresponding complementary sequence:

a. 5'-CCATCCTCTTGAAAATCTC-3' (SEQ ID NO: 5)

b. 5'-TCTCRTCTCACAAGTTTGGC-3' (SEQ ID NO: 6)

4. A method for detecting *Pectinatus frisingensis*, comprising synthesizing nucleic acids from the gene sequence according to claim 1 to produce a nucleotide, and using said nucleotide as a primer for synthesis of nucleic acids, and treating the nucleic acid by gene amplification to detect the bacteria.

5. A method for detecting *Pectinatus frisingensis*,

comprising synthesizing nucleic acids from the gene sequence according to claim 2 to produce a nucleotide, and using said nucleotide as a primer for synthesis of nucleic acids, and treating the nucleic acid by gene amplification to detect the bacteria.

6. A method for detecting *Pectinatus frisingensis*, comprising synthesizing nucleic acids from the gene sequence according to claim 1 or the gene sequence according to claim 3 to produce a nucleotide, and a nucleotide sequence coding 16S rRNA gene or *Pectinatus frisingensis* and using said nucleotides as primers for synthesis of nucleic acids, and treating the nucleic acid by gene amplification to detect the bacteria.

7. The method according to claim 6 wherein the nucleotide sequence coding the 16S rRNA gene of *Pectinatus frisingensis* has the following sequence:

5'-CGTATCCAGAGATGGATATT-3' (SEQ ID NO: 10).

8. A method for detecting *Pectinatus frisingensis*, comprising synthesizing nucleic acids from the gene sequence according to claim 2 or the gene sequence according to claim 3 to produce a nucleotide, and a nucleotide sequence coding 16S rRNA gene or *Pectinatus frisingensis* and using said nucleotides as primers for synthesis of nucleic acids, and

treating the nucleic acid by gene amplification to detect the bacteria.

9. The method according to claim 8 wherein the nucleotide sequence coding the 16S rRNA gene of *Pectinatus* frisingensis has the following sequence:

5'-CGTATCCAGAGATGGATATT-3' (SEQ ID NO: 10).